

REMARKS

Claims 26-47 and 49-81 are pending in this application. Claim 48 has been canceled without prejudice and claims 52-81 have been added.

Applicant appreciates the indication that claims 29-32 and 48-50 would be allowed if rewritten into independent form. Claim 1 has been amended to include the limitations of dependent claim 29 and new claims 52 and 71 correspond to dependent claims 30 and 48 rewritten into independent form thereby placing all claims in condition for allowance.

CONCLUSION

Applicants submit that all pending claims are patentable over the art of record, thus placing the subject application in condition for allowance. Accordingly, favorable reconsideration and issuance of a Notice of Allowance are respectfully requested.


Attached is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned with "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

If a telephone interview would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (415) 412-3322.

Please charge the two-month extension, excess claim fees and any other required fees, or credit any overpayment to Deposit Account No. 50-1247.

Respectfully submitted,

Date 2/13/03


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

26. (Amended) A method of forming an elongate ablation to electrically isolate one part of the heart from another part of the heart, comprising the steps of:

providing an ablation device having an elongate ablating portion;
forming an opening in the patient's pericardium;
introducing the ablation device through the opening in the pericardium;
positioning the elongate ablating portion in contact with a portion of the patient's

heart; [and]

ablating tissue with the elongate ablating portion[.]; and

forming a lesion extending from the pulmonary vein isolation lesion to the
annulus of the mitral valve.

27. The method of claim 26, wherein:

the ablating step is carried out to form a pulmonary vein isolation lesion which electrically isolates at least one of the pulmonary veins.

28. The method of claims 26 or 27, wherein:

the ablating step is carried out with the elongate ablating portion contacting an epicardial surface.

29. The method of claim 27, further comprising the step of:

forming a lesion extending from the pulmonary vein isolation lesion to the annulus of the mitral valve.

30. The method of claim 27, wherein:

the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a first lesion adjacent to two of the pulmonary veins.

31. The method of claim 30, wherein:

the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a second lesion near the other two pulmonary veins.

32. The method of claim 31, wherein:
the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a third lesion which connects the first and second lesions.

33. The method of claim 32, wherein:
the ablating step is carried out with the third lesion being formed by two lesions.

34. (Amended) The method of claim [26] 27, further comprising the step of:
inserting the ablation device into the patient's heart through a penetration in the patient's heart.

35. The method of claim 34, wherein:
the positioning step is carried out with the elongate ablating portion being in contact with an epicardial surface.

36. (Amended) The method of claim [35] 34, wherein:
the inserting step is carried out with the ablation device extending through a hemostatic seal in an atrial wall.

37. The method of claim 36, wherein:
the inserting step is carried out with the hemostatic seal being a purse-string suture.

38. The method of claim 26, wherein:
the providing step is carried out with a plurality of ablation devices, each of the ablation devices having at least one elongate ablating portion; and
the ablating step is carried out using the plurality of ablation devices.

39. The method of claim 38, wherein:
the plurality of ablation devices have different shapes.

40. The method of claim 39, wherein:
the providing step is carried out with each of the ablation devices being shaped to engage a predetermined surface of the heart.

41. The method of claim 40, wherein:
the providing step is carried out with the predetermined surface of the heart being an interior wall of the heart.

42. The method of claim 41, wherein:
the providing step is carried out with the predetermined surface of the heart being an interior wall of an atria chamber.

43. The method of claim 26, further comprising the steps of:
moving the elongate ablating portion to another position; and
forming another elongate ablation after the moving step.

44. The method of claim 26, further comprising the step of:
forming a series of elongate ablations which cooperate with one another to treat atrial fibrillation.

45. The method of claim 26, wherein:
the providing step is carried out with the ablating element being a cryosurgical element.

46. The method of claim 26, wherein:
the providing step is carried out with the ablating element being an ablating element selected from the group consisting of cryosurgical, RF ablation, ultrasound, microwave, laser, chemical agent, biological agent, light-activated agent, laser ablation and resistance heating ablation.

47. The method of claim 26, wherein:
the providing step is carried out with the elongate ablating surface extending a distance of at least about 7 times to about 30 times an outer diameter.

48. Canceled

49. The method of claim 26, further comprising the step of:
measuring a temperature of a wall of the heart on a side opposite the elongate ablating portion.

50. The method of claim 49, wherein:
the measuring step is carried out to determine when the ablating step is complete.

51. The method of claim 26, wherein:
the providing step is carried out with the elongate ablating surface being malleable.

Please add new claims 52-81 as follows:

52. (new) A method of forming an elongate ablation to electrically isolate one part of the heart from another part of the heart, comprising the steps of:

providing an ablation device having an elongate ablating portion, the device having a first jaw and a second jaw which are movable toward and away from one another to clamp a cardiac structure;

forming an opening in the patient's pericardium;

introducing the ablation device through the opening in the pericardium;

positioning the elongate ablating portion in contact with a portion of the patient's heart; and

ablating tissue with the elongate ablating portion.

53. (new) (new) The method of claim 52, wherein:

the ablating step is carried out to form a pulmonary vein isolation lesion which electrically isolates at least one of the pulmonary veins.

54. (new) The method of claims 52 or 53, wherein:
the ablating step is carried out with the elongate ablating portion contacting an epicardial surface.

55. (new) The method of claim 52, further comprising the step of:
inserting the ablation device into the patient's heart through a penetration in the patient's heart.

56. (new) The method of claim 55, wherein:
the positioning step is carried out with the elongate ablating portion being in contact with an epicardial surface.

57. (new) The method of claim 55, wherein:
the inserting step is carried out with the ablation device extending through a hemostatic seal in an atrial wall.

58. (new) The method of claim 57, wherein:
the inserting step is carried out with the hemostatic seal being a purse-string suture.

59. (new) The method of claim 52, wherein:
the providing step is carried out with a plurality of ablation devices, each of the ablation devices having at least one elongate ablating portion; and
the ablating step is carried out using the plurality of ablation devices.

60. (new) The method of claim 59, wherein:
the plurality of ablation devices have different shapes.

61. (new) The method of claim 59, wherein:
the providing step is carried out with each of the ablation devices being shaped to engage a predetermined surface of the heart.

62. (new) The method of claim 61, wherein:
the providing step is carried out with the predetermined surface of the heart being an interior wall of the heart.

63. (new) The method of claim 61, wherein:
the providing step is carried out with the predetermined surface of the heart being an interior wall of an atria chamber.

64. (new) The method of claim 52, further comprising the steps of:
moving the elongate ablating portion to another position; and
forming another elongate ablation after the moving step.

65. (new) The method of claim 52, further comprising the step of:
forming a series of elongate ablations which cooperate with one another to treat atrial fibrillation.

66. (new) The method of claim 52, wherein:
the providing step is carried out with the ablating element being a cryosurgical element.

67. (new) The method of claim 52, wherein:
the providing step is carried out with the ablating element being an ablating element selected from the group consisting of cryosurgical, RF ablation, ultrasound, microwave, laser, chemical agent, biological agent, light-activated agent, laser ablation and resistance heating ablation.

68. (new) The method of claim 52, wherein:

the providing step is carried out with the elongate ablating surface extending a distance of at least about 7 times to about 30 times an outer diameter.

69. (new) The method of claim 52, further comprising the step of:
measuring a temperature of a wall of the heart on a side opposite the elongate ablating portion.

70. (new) The method of claim 69, wherein:
the measuring step is carried out to determine when the ablating step is complete.

71. (new) A method of forming an elongate ablation to electrically isolate one part of the heart from another part of the heart, comprising the steps of:
providing an ablation device having an elongate ablating portion;
forming an opening in the patient's pericardium;
introducing the ablation device through the opening in the pericardium;
positioning the elongate ablating portion in contact with a portion of the patient's heart; and
ablating tissue with the elongate ablating portion, the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a first lesion adjacent to two of the pulmonary veins.

72. (new) The method of claim 71, wherein:
the ablating step is carried out to form a pulmonary vein isolation lesion which electrically isolates at least one of the pulmonary veins.

73. (new) The method of claims 71 or 72, wherein:
the ablating step is carried out with the elongate ablating portion contacting an epicardial surface.

75. (new) The method of claim 71, wherein:

the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a second lesion near the other two pulmonary veins.

76. (new) The method of claim 75, wherein:
the ablating step is carried out with the pulmonary vein isolation lesion being formed by creating a third lesion which connects the first and second lesions.

77. (new) The method of claim 76, wherein:
the ablating step is carried out with the third lesion being formed by two lesions.

78. (new) The method of claim 71, wherein:
the positioning step is carried out with the elongate ablating portion being in contact with an epicardial surface.

79. (new) The method of claim 71, further comprising the step of:
inserting at least part of the ablation device into the patient's heart through a penetration in the patient's heart.

80. (new) The method of claim 79, wherein:
the inserting step is carried out with the ablation device extending through a hemostatic seal in an atrial wall.

81. (new) The method of claim 79, wherein:
the inserting step is carried out with the hemostatic seal being a purse-string suture.